# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION 895 Aerovista Place, Suite 101 San Luis Obispo, California

# ORDER NO. R3-2023-0010

# AMENDING THE MONITORING AND REPORTING PROGRAM FOR WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2020-0005 NPDES NO. CA0047856

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR THE CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION CALIFORNIA MEN'S COLONY WASTEWATER TREATMENT PLANT

The California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) finds:

- 1. The California Department of Corrections and Rehabilitation (Discharger) is the owner and operator of the California Men's Colony wastewater treatment plant (Facility), which discharges treated wastewater to Chorro Creek, a water of the United States.
- 2. The Facility provides wastewater treatment for the California Men's Colony, California Army National Guard's Camp San Luis Obispo, Cuesta College, and several San Luis Obispo County facilities including the county jail, education center, and operations facility.
- The Central Coast Water Board regulates the Facility pursuant to Waste Discharge Requirements Order No. R3-2020-0005, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047856 (Order No. R3-2020-0005 or Permit), which authorizes the Discharger to discharge tertiary treated effluent to Chorro Creek.
- 4. Chorro Creek recharges the Chorro Valley groundwater basin, which is a water source for the City of Morro Bay, as well as a fresh water source for the Morro Bay estuary.

# Discharges of Plastic Pieces

5. On April 28, 2022, Central Coast Water Board staff inspected the Facility and observed and collected, via a 500-micron metal sieve, small plastic pieces suspended in the Facility's effluent and receiving water (Chorro Creek).

- 6. During an inspection of the facility on April 28, 2022, Central Coast Water Board staff observed that the Facility was discharging pieces of plastics in concentrations that pose potential adverse impacts to beneficial uses in receiving water. Due to the characteristics of plastic, the plastic pieces discharged to receiving water will likely remain in the environment for a long time. The effects of plastics in surface water include, but are not limited to, the transport of harmful pollutants, chemical leaching,<sup>1</sup> and obstruction of digestive tracts of aquatic life.<sup>2</sup>
- 7. Beneficial uses of Chorro Creek potentially impacted or adversely affected by the Facility's discharge of plastics include the following: water contact recreation (REC-1); wildlife habitat (WILD); cold fresh water habitat (COLD); warm fresh water habitat (WARM); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); preservation of biological habitats of special significance (BIOL); rare, threatened, or endangered species (RARE); and commercial and sport fishing (COMM). The Facility's discharge of plastics potentially also impacted beneficial uses for Morro Bay National Estuary and the Pacific Ocean at Morro Bay.<sup>3</sup>
- 8. On May 5, 2022, Central Coast Water Board and State Water Resources Control Board (State Water Board) Office of Enforcement staff met with the Discharger to discuss Central Coast Water Board staff's observations from its April 28, 2022 Facility inspection specific to plastics in the Facility's effluent and receiving water. During that meeting, Central Coast Water Board staff stressed the need for the Discharger to cease the discharge of plastics immediately and requested information on the Discharger's next steps to address the unauthorized discharges of plastics from the Facility.
- 9. On May 11, 2022, the Discharger met with a consultant at the Facility to evaluate short-term measures that the Discharger could implement to address the plastics in the Facility's effluent. On May 13, 2022, the Discharger summarized the interim measures implemented, which included source control at the California Men's Colony to reduce inmates' access to trash can liners, improved operational controls including more frequent cleaning of screens and grinders, plans for an added mechanical screening process at the effluent chamber, and a commitment to provide weekly updates to the Central Coast Water Board regarding the measures implemented to address the plastics in the Facility's effluent.

<sup>&</sup>lt;sup>1</sup> Issac MN, Kandasubramanian B. Effect of microplastics in water and aquatic systems. Environ Sci Pollut Res Int. 2021 Apr;28(16):19544-19562. doi: 10.1007/s11356-021-13184-2. Epub 2021 Mar 2. PMID: 33655475; PMCID: PMC7924819. <u>https://pubmed.ncbi.nlm.nih.gov/33655475/</u>

<sup>&</sup>lt;sup>2</sup> Bucci, K., Tulio, M., & Rochman, C. M. (2020). What is known and unknown about the effects of plastic pollution: A meta-analysis and systematic review. Ecological Applications, 30(2), e02044. <u>https://pubmed.ncbi.nlm.nih.gov/31758826/</u>

<sup>&</sup>lt;sup>3</sup> For a complete list of designated beneficial uses for Chorro Creek, Morro Bay National Estuary, and the Pacific Ocean at Morro Bay, reference Tables 2-1 and 2-2 in the 2019 Water Quality Control Plan for the Central Coast Basin (Basin Plan) at the following website: <u>https://www.waterboards.ca.gov/centralcoast/publications\_forms/publications/basin\_plan/docs/2019\_ba</u> sin\_plan\_r3\_complete\_webaccess.pdf

- 10. On June 30, 2022, the Central Coast Water Board issued a notice of violation for the unauthorized discharges of plastics from the Facility and alleged violations of Order No. R3-2020-0005, a requirement pursuant to California Water Code (Water Code) section 13267 to submit a technical report to characterize the impacts related to the discharge of plastics from the Facility to Chorro Creek, and a requirement pursuant to Water Code section 13383 to submit a monitoring plan, that at a minimum, includes a procedure and schedule for monitoring of plastics in the Facility's effluent and receiving water.
- 11. On July 29, 2022, the Discharger submitted a draft monitoring plan, which was developed by technical consultant GHD, for monitoring plastics in the Facility's effluent and receiving water.
- 12. On November 14, 2022, the Discharger submitted a technical memorandum prepared by GHD, dated November 11, 2022, estimating that the daily dry mass of plastics discharged to Chorro Creek ranges from 30 milligrams (mg) to 8,200 mg. GHD made this estimate using 10 days of sampling data provided to GHD by the Facility chemist.

## Ultraviolet (UV) System Issues

- 13. On June 29, 2022, the Discharger notified the Central Coast Water Board through email correspondence that the UV disinfection system reactor has not consistently operated at or above 57 percent UV transmittance at 245 nm, as required by the Permit.
- 14. On August 31, 2022, the Discharger self-reported eight exceedances of the effluent limit for total coliform bacteria occurring between July 14, 2022, and July 23, 2022. On November 2, 2022, the Discharger self-reported four exceedances of the total coliform bacteria effluent limit occurring between September 10, 2022, and September 17, 2022. These total coliform bacteria effluent limitation exceedances could indicate potential deficiencies in UV system maintenance.

# Alternate Discharge Monitoring Location

15. On October 31, 2022, the Central Coast Water Board received a request from the discharger for approval of an alternate discharge monitoring location for M-001 due to ease of sampling and staff safety concerns. Alternate discharge monitoring location M-002, located in the vault immediately downstream of the UV disinfection system, is a suitable alternate discharge monitoring location for M-001. However, plastics monitoring must occur at discharge monitoring location M-001.

# Legal Basis and Authority

16. The Central Coast Water Board is a state regulatory agency with responsibility for

protecting the quality of the waters of the state within its area of jurisdiction. The Central Coast Water Board has authority to require submission of information, direct action, establish regulations, levy penalties, and bring legal action when necessary to protect water quality.

- 17. The monitoring and reporting program contained in the Permit is established under Water Code sections 13267 and 13383.
- 18. Water Code section 13267(b)(1) authorizes the Central Coast Water Board, when investigating the water quality of waters of the state within its region in connection with the review of waste discharge requirements, to require that any person who discharges waste within the Central Coast region to provide technical or monitoring program reports that the Central Coast Water Board requires. The burden, including costs, of these reports must bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.
- 19. Water Code section 13383(a) authorizes the Central Coast Region Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements for any person who owns or operates a publicly owned treatment works or other treatment works treating domestic sewage that discharges into waters of the United States. Water Code section 13383(b) further authorizes the Central Coast Water Board to require such persons to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.
- 20. Order No. R3-2020-0005 establishes requirements for discharges from the Facility, including discharge prohibitions, effluent limitations, receiving water limitations, and recycled water specifications described below.
- 21. Order No. R3-2020-0005 does not specify a requirement to monitor for plastics in the effluent or in the receiving water. Order No. R3-2020-0005 does not authorize the discharge of plastics to Chorro Creek.
- 22. Order No. R3-2020-0005, Provision III, contains the following discharge prohibitions:
  - Provision III.B. The discharge of any waste not specifically regulated by this Order, excluding storm water regulated by General Permit No. CAS000001 (Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities), is prohibited.
  - Provision III.D. Creation of a condition of pollution, contamination, or nuisance, as defined by section 13050 of the Water Code, is prohibited.
  - Provision III.E. The discharge shall not cause or contribute to adverse impacts to beneficial uses of water or to threatened or endangered species and their habitat.

- 23. Order No. R3-2020-0005, Provision IV.A.1.d. contains the following final effluent limitation at Discharge Point No. 001:
  - Floating Material. Discharge of treated wastewater through Discharge Point No. 001 shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
- 24. Order No. R3-2020-0005, Provision V.A. contains the following receiving water limitations and surface water limitations:
  - Provision V.A.3. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
  - Provision V.A.4. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
  - Provision V.A.5. Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.
- 25. Order No. R3-2020-0005, Provision IV.C. includes the following recycling specifications:
  - Provision IV.C.3.c.iii. The UV disinfection system reactor must operate at or above 57% UV transmittance at 245 nm.
  - Provision IV.C.3.i. The Facility shall be operated in accordance with an approved operations plan, which specifies clearly the operational limits and responses required for critical alarms. The operations plan shall be submitted to and approved by the Division of Drinking Water prior to issuance of the operating permit for the UV disinfection system. A copy of the approved operations plan shall be maintained at the treatment plant and be readily available to operations personnel and regulatory agencies.
  - Provision IV.C.3.j. The UV system must be operated with a built-in automatic reliability feature that must be triggered when the system is below the target UV dose. If the measured UV dose goes below the minimum UV dose, the UV reactor in question must alarm and startup the next available UV lamp bank or reactor.
  - Provision IV.C.3.k. specifies that conditions that should shut a reactor down and divert flow include inability to meet the target dose, high flow, low UVT, or reactor failure.
- 26. The Central Coast Water Board is amending the monitoring and reporting program of Order No. R3-2020-0005 to require the Discharger to monitor and report plastics contained in the Facility's effluent and receiving water. The monitoring and reporting requirements for plastics is made pursuant to Water Code section 13383.
- 27. The Central Coast Water Board is amending the monitoring and reporting program of Order No. R3-2020-0005 to require the Discharger to submit on a monthly basis its UV system maintenance logs to the Central Coast Water Board. This reporting

requirement is necessary to determine compliance with the recycling specifications in Order No. R3-2020-0005. The monitoring and reporting requirements for submitting monthly UV system maintenance logs is made pursuant to Water Code section 13267. The estimated cost of preparing the reports is \$1,000/month. The burden of these reports, including costs, bears a reasonable relationship to need for the reports and benefits to be obtained.

Any aggrieved person may petition the State Water Board to review the decision of the Central Coast Water Board regarding this order amending the monitoring and reporting program for Order No. R3-2020-0005. The petition must be received by the State Water Board at the following address within 30 calendar days of the Central Coast Water Board's action:

State Water Resources Control Board Office of Chief Counsel P.O. Box 100, 1001 I Street Sacramento, CA 95812-0100

For instructions on how to file a petition for review, see: <a href="http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/wqpetition\_instr.s">http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/wqpetition\_instr.s</a> <a href="http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/wqpetition\_instr.s">http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality/wqpetition\_instr.s</a>

# IT IS HEREBY ORDERED THAT:

- Attachment E, Monitoring and Reporting Program, of Waste Discharge Requirements Order No. R3-2020-0005 for the California Department of Corrections and Rehabilitation California Men's Colony Wastewater Treatment Plant is hereby amended as shown in the attachment to this order. The amended requirements shall be effective on June 1, 2023.
- 2. Staff is directed to prepare and post a conformed copy of Order No. R3-2020-0005 incorporating the revisions made by this order.



Matthew T. Keeling, Executive Officer

Attachments

1. Amended Monitoring and Reporting Program

# ATTACHMENT E – MONITORING AND REPORTING PROGRAM AMENDED BY ORDER NO. R3-2023-0010 ON MAY 9, 2023

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# ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of title 40 CFR require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Coast Region Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and California laws and/or regulations.

# I. GENERAL MONITORING PROVISIONS

- A. Laboratory Certification. Laboratories analyzing monitoring samples shall be certified by the State Water Board Division of Drinking Water Environmental Laboratory Accreditation Program, in accordance with the provision of Water Code section 13176 and must include quality assurance/quality control data with their reports.
- **B.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and approval of the Central Coast Water Board.
- **C.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references.
  - 1. A Guide to Methods and Standards for the Measurement of Water Flow, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
  - Water Measurement Manual, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
  - Flow Measurement in Open Channels and Closed Conduits, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22050. Order by NTIS No. PB-273 535/5ST.
  - 4. NPDES Compliance Sampling Manual, U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)
- **D.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

- **E.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F. Unless otherwise specified by this MRP, all monitoring shall be conducted according to test procedures established at 40 CFR part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants*. All analyses shall be conducted using the lowest practical quantitation limit achievable using the specified methodology. Where effluent limitations are set below the lowest achievable quantitation limits, pollutants not detected at the lowest practical quantitation limits will be considered in compliance with effluent limitations. Analysis for toxic pollutants listed by the California Toxics Rule shall also adhere to guidance and requirements contained in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (2005) (SIP).
- **G.** The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or the most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

State Water Resources Control Board Quality Assurance Program Officer Office of Information Management and Analysis 1001 I Street, Sacramento, CA 95814

# **II. MONITORING LOCATIONS**

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Discharge Point Name	Monitoring Location Name	Monitoring Location Description		
	M-INF	Influent wastewater at the plant headworks, prior to discharge to the oxidation ditches, and following all significant inputs to the collection system of untreated wastewater inflow and infiltration.		
001	M-001	Tertiary treated wastewater beyond discharge point 001 and prior to contact with receiving water flow. Latitude: 35.325° N Longitude: 120.7525° W		
	M-002	Tertiary treated wastewater located in the vault immediately downstream of the ultraviolet treatment system and prior to contact with the receiving water flow. <sup>[1]</sup>		
BUI-UUI		A location representative of disinfected recycled water prior to distribution.		
R-001		At the discharge from Chorro Reservoir, immediately below the dam. <sup>[2]</sup>		
	R-002	Upstream and within 100 feet of Discharge Point No. 001 where stream flow is representative of background conditions in Chorro Creek. <sup>[2]</sup>		
	R-003	Downstream and within 100 feet of Discharge Point No. 001 where stream flow is representative of conditions within Chorro Creek after contact and mixing with the discharge. <sup>[2]</sup>		
	R-004	Approximately 0.6 miles downstream of the point of discharge, at the site of a washed out concrete diversion dam.		
		Twin-Bridges at the bridge crossing with Chorro Creek and South Bay Boulevard.		

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
		Upgradient of the WWTP, as approved by the Central Coast Water Board.
GW-002		Downgradient of the WWTP, as approved by the Central Coast Water Board.
	BIO-001	A location where a representative sample of biosolids may be obtained, after handling, and prior to disposal.

<sup>[1]</sup> M-002 is an alternative monitoring location to monitoring location M-001 that may be used if M-001 is not safely accessible. Discharge is not permitted at M-002. Plastics cannot be monitored at M-002 and must be monitored at M-001.

<sup>[2]</sup> If conditions are determined to be unsafe for sample collection, the Discharger may monitor directly from Chorro Reservoir at a location that provides a representative sample of upstream water quality. The Discharger shall provide a description of unsafe conditions and alternative monitoring location.

The north latitude and west longitude information in Table E-1 are approximate for administrative purposes.

## III. INFLUENT MONITORING REQUIREMENTS

#### A. Monitoring Location INF-001

**1.** The Discharger shall monitor influent to the Facility at Monitoring Location M-INF as follows:

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow	MGD	Continuous	Continuous <sup>[1][3]</sup>
Biochemical Oxygen Demand 5-day @ 20°C (BOD <sub>5</sub> ) <sup>[2]</sup>	mg/L	24-hr Composite	2/Month
Total Suspended Solids (TSS) <sup>[2]</sup>	mg/L	24-hr Composite	2/Month
Total Dissolved Solids (TDS)	mg/L	Grab	1/Year
Calcium (Ca)	mg/L	Grab	1/Year
Magnesium (Mg)	mg/L	Grab	1/Year
Sodium (Na)	mg/L	Grab	1/Year
Potassium (K)	mg/L	Grab	1/Year
Chloride (Cl)	mg/L	Grab	1/Year
Sulfate (SO <sub>4</sub> )	mg/L	Grab	1/Year
Bicarbonate (HCO <sub>3</sub> )	mg/L	Grab	1/Year
Carbonate (CO <sub>3</sub> )	mg/L	Grab	1/Year
Nitrate (NO <sub>3</sub> as N)	mg/L	Grab	1/Year
Boron (B)	mg/L	Grab	1/Year
Fluoride (F)	mg/L	Grab	1/Year

Table E-2. Influent Monitoring

<sup>[1]</sup> The Discharger shall report the average and maximum daily flow.

Collection of BOD<sub>5</sub> and TSS influent samples shall occur on days that effluent samples are collected.
 The State Water Board Recycled Water Policy section 3.2.1 requires wastewater and recycled water dischargers to annually report monthly volumes of influent. Annual reports are due by April 30 of each year and must include data for the previous calendar year, beginning with calendar year 2019. For calendar year 2019, data is required to be reported for months January through December 2019. Dischargers are required to submit the volumetric data to GeoTracker at http://geotracker.waterboards.ca.gov.

# **IV. EFFLUENT MONITORING REQUIREMENTS**

#### A. Monitoring Location M-001 (or alternatively M-002)

1. The Discharger shall monitor effluent discharged to Monitoring Location M-001 or M-002 (Discharge Point No. 001) as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level.

Parameter	Units	Sample Type	Minimum Sampling Frequency
pH <sup>[1]</sup>	standard units	Grab	1/Day
Settleable Solids	mL/L	Grab	1/Day
Turbidity	NTU	Grab	1/Day
Chlorine, Total Residual <sup>[2]</sup>	mg/L	Grab	1/Day
Chlorine Used	lbs/day	Grab	1/Day
Total Coliform Bacteria	MPN/100 mL	Grab	5/Week <sup>[3]</sup>
Dissolved Oxygen	mg/L	Grab	5/Week
BOD₅	mg/L	24-hr Composite	1/Week
	% removal	Calculated	1/Week
TSS	mg/L	24-hr Composite	1/Week
155	% removal	Calculated	1/Week
Nitrate (as N)	mg/L	Grab	1/Week
Nitrite (as N)	mg/L	Grab	1/Week
Temperature <sup>[1]</sup>	٩F	Instantaneous	1/Week
Ammonia, Total (as N)	mg/L	Grab	1/Week
Total Kjeldahl Nitrogen (as N)	mg/L	Grab	1/Week
Total Nitrogen (as N)	mg/L	Calculated <sup>[4]</sup>	1/Week
Chloride	mg/L	Grab	1/Week
Plastics	mg and unit <sup>[5]</sup>	Composite Grab <sup>[6][7]</sup>	1/Week
Dissolved Orthophosphate	mg/L	Grab	1/Month
Hardness, as CaCO₃	mg/L	Grab	1/Month
Oil and Grease	mg/L	Grab	1/Month
Sodium	mg/L	Grab	1/Month
TDS	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Bis(2-ethylhexyl) Phthalate	µg/L	Grab	1/Quarter <sup>[8]</sup>
Chlorodibromomethane	µg/L	Grab	1/Month
Copper, Total Recoverable	µg/L	Grab	1/Month
Dichlorobromomethane	µg/L	Grab	1/Month
Phthalate Esters	µg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Cobalt	mg/L	Grab	1/Year

#### CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION CALIFORNIA MEN'S COLONY WASTEWATER TREATMENT PLANT

Parameter	Units	Sample Type	Minimum Sampling Frequency
Iron	mg/L	Grab	1/Year
Lithium	mg/L	Grab	1/Year
Manganese	mg/L	Grab	1/Year
Methylene Blue Activated Substances	mg/L	Grab	1/Year
Molybdenum	mg/L	Grab	1/Year
Vanadium	mg/L	Grab	1/Year
Calcium (Ca)	mg/L	Grab	1/Year
Magnesium (Mg)	mg/L	Grab	1/Year
Potassium (K)	mg/L	Grab	1/Year
Bicarbonate (HCO <sub>3</sub> )	mg/L	Grab	1/Year
Carbonate (CO <sub>3</sub> )	mg/L	Grab	1/Year
Fluoride (F)	mg/L	Grab	1/Year
Acute Toxicity <sup>[9]</sup>	% survival	Grab	1/Quarter
Chronic Toxicity <sup>[9]</sup>	TUc	Grab	1/Year
CTR Pollutants <sup>[10] [11]</sup>	µg/L	Grab	1/Year
Title 22 Pollutants <sup>[112 [13]</sup>	µg/L	Grab	1/Year

<sup>[1]</sup> Temperature and pH are to be measured at the same time the total ammonia sample is collected. Results shall be used to calculate and report un-ionized ammonia concentrations.

- <sup>[2]</sup> Monitoring required only on days when sodium hypochlorite or other chlorinating agents are used. Compliance determinations for total residual chlorine (TRC) shall be based on 99 percent compliance. To determine 99 percent compliance with the effluent limitation for TRC, the following conditions shall be met: (1) the total time during which TRC exceeds 0.1 mg/L (instantaneous maximum value) shall not exceed 7 hours and 26 minutes in any calendar month; (2) no excursion above 0.1 mg/L shall exceed 30 minutes; and (3) no excursion shall exceed 2.0 mg/L. Verification of excursion length shall be submitted with monthly monitoring report.
- <sup>[3]</sup> Total coliform bacteria should be analyzed daily when wastewater is being reclaimed/recycled for irrigation.
- <sup>[4]</sup> Total nitrogen shall be equal to the sum of total Kjeldahl nitrogen, nitrite, and nitrate.
- <sup>[5]</sup> Each individual piece of plastic, regardless of size, is to be counted as one unit.
- <sup>[6]</sup> Hold 500-micron sieve, minimum diameter of 21 cm (8.25 inch), in center of effluent flow stream for 60 seconds. Collect any plastic pieces accumulated on sieve and store for analysis. Repeat collection process a minimum of three times. Dry all collected plastic pieces, weigh, and count. Report plastics by total accumulated weight and total number of plastic pieces. The same gage and diameter sieve must be used across all effluent sampling events for the duration of plastics monitoring at the Facility.
- <sup>[7]</sup> Plastic samples must be collected at monitoring location M-001.
- <sup>[8]</sup> If bis (2-ethylhexyl) phthalate is found to be non-detect for 2 consecutive quarters, monitoring may be reduced to semiannual. If bis (2-ethylhexyl) phthalate is found to be non-detect for 2 years, monitoring may be reduced to annually as part of the annual CTR monitoring. If bis (2-ethylhexyl) phthalate is detected at any time, monthly monitoring shall be resumed for a minimum of 6 consecutive months until a non-detect is achieved, at which time quarterly monitoring shall resume.
- <sup>[9]</sup> Whole effluent toxicity monitoring shall be conducted according to the requirements established in section V of this MRP.
- <sup>[10]</sup> The CTR priority pollutants are those listed by the California Toxics Rule at 40 CFR 131.38 (b) (1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The Discharger shall instruct its analytical laboratory to establish calibration standards so that the Minimum Levels (MLs) presented in Appendix 4 of the SIP are the lowest calibration standards. The Discharger and its analytical laboratory shall select MLs which are below applicable water quality criteria of the CTR; and when applicable water quality criteria are below all

MLs, the Discharger and its analytical laboratory shall select the lowest ML. Monitoring for the CTR pollutants in effluent shall occur simultaneously with monitoring required for the CTR pollutants in receiving water.

- <sup>[11]</sup> Those 126 pollutants with applicable water quality objectives established by the California Toxics Rule (CTR) at 40 CFR 131.38.
- <sup>[12]</sup> The title 22 pollutants are those pollutants for which the DDW has established Maximum Contaminant Levels (MCLs) at title 22, division 4, chapter 15, sections 64431 (inorganic chemicals) and 64444 (organic chemicals of the California Code of Regulations. Where these pollutants are included in other groups of pollutants (CTR Priority Pollutants), monitoring does not need to be duplicated. Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by title 22 of the California Code of Regulations, division 4, chapter 15, section 64432 and 64445.1. Monitoring for the title 22 pollutants in effluent shall occur simultaneously with monitoring required for the title 22 pollutants in receiving water.
- <sup>[13]</sup> Analytical methods shall adhere to the Detection Limits for Purposes of Reporting (DLRs) established by title 22 of the CCR, division 4, chapter 15, section 64432 (inorganics) and section 64445.1 (organics).

# V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

## A. Acute Toxicity

- 1. Acute Toxicity Monitoring Requirements Monitoring Location M-001 (or M-002)
  - a. Compliance with the acute toxicity effluent limitations of this Order shall be evaluated by measuring survival of test organisms exposed to 96-hour continuous flow-through bioassays.
  - b. Test organisms shall be fathead minnow unless the Executive Officer specifies in writing otherwise.
  - c. All bioassays shall be performed using the most sensitive species based on the most recent screening test results and in accordance with the most up-to-date protocols in 40 CFR 136, currently in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5th Edition.
  - d. If the Discharger can demonstrate that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limitation may be determined after the test samples are adjusted to remove the influence of those substances. The Discharger must obtain written approval from the Executive Officer to authorize such an adjustment.
  - e. The sample shall be taken from treated effluent after disinfection. Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported in the monthly SMRs or as specified by the Central Coast Water Board.
  - f. The presence of acute toxicity shall be determined as significantly reduced survival of test organisms at 100 percent effluent compared to a control using a statistical t-test. The Discharger shall include with the SMR the percent survival of the organisms for both the effluent and control, and the results of the t-test ("statistically different" or "not statistically different").

If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an

acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

- B. Chronic Toxicity
  - 1. Chronic Toxicity Monitoring Requirements Monitoring Location M-001 (or M-002)
    - a. **Toxicity Trigger.** A toxicity trigger of 1 toxicity unit chronic (TUc) is retained from the previous order for the discharge of effluent through Discharge Point No. 001.
    - b. **Sampling.** The Discharger shall collect grab samples of the effluent at M-001, as specified in Table E-3 above, for critical life stage toxicity testing as indicated below.
    - c. **Test Species.** The test species shall include a vertebrate, an invertebrate, and an aquatic plant. After a three-month screening period, monitoring may be reduced to the most sensitive species. Screening phase chronic toxicity monitoring shall be conducted with the following three species with approved test protocols. The Executive Officer may change the test species if data suggest that another test species is more sensitive to the discharge.

Species	Scientific Name	Effect	Test Duration (days)
Fathead Minnow   Pimephales promelas		Larval Survival and Growth	7
Water Flea	Ceriodaphnia dubia	Survival; number of young	6 to 8 days
Green Alga	Selenastrum capricornutum	Growth Rate	4 days

# Table E-4 Short-Term Methods for Estimating Chronic Toxicity – Fresh Water

d. Methods. Sample collection, handling, and preservation shall be in accordance with U.S. EPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-1 and Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, currently third edition (EPA-821-R-02-014) and Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters and Receiving Waters to Freshwater Organisms, currently fourth Edition (EPA-821-R-02-013), with exceptions granted the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

**Dilution Series.** The Discharger shall conduct tests at 100%, 85%, 70%, 50%, and 25%. The "%" represents percent effluent as discharged. The Discharger may use the biological buffer MOPS (3-(N-Morpholino) propanesulfonic Acid) to control pH drift and ammonia toxicity caused by increasing pH during the test.

# 2. Chronic Toxicity Reporting program

a. **Routine Reporting.** Toxicity test results for the current reporting period shall include, at a minimum, for each test:

- Sample dates
- Test initiation date
- Test species
- End point values for each dilution (e.g. number of young, growth rate, percent survival)
- No observed effect concentration (NOEC) values in percent effluent
- Inhibitory concentrations at various percent thresholds (IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub>, and IC<sub>50</sub>) values or effective concentration thresholds (EC<sub>15</sub>, EC<sub>25</sub>... etc.) in percent effluent
- TUc values (100/NOEC, 100/IC<sub>25</sub>, or 100/EC<sub>25</sub>)
- Mean percent mortality (±s.d.) after 96 hours in 100% effluent (if applicable)
- NOEC and lowest observed effect concentration (LOEC) values for reference toxicant tests
- IC50 or EC50 values for reference toxicant tests
- Available water quality measurements for each test (pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia)
- b. **Compliance Summary.** The results of the chronic toxicity testing shall be provided in the next Self-Monitoring Report and shall include a summary table of chronic toxicity data from at least eleven of the most recent samples. The information in the table shall include the items listed above under 2.a.

## C. Quality Assurance

- **1.** For the acute toxicity testing using a t-test, two dilutions shall be used, i.e., 100 percent effluent and a control (when a t-test is used instead of an  $LC_{50}$ ).
- 2. If organisms are not cultured in-house, concurrent testing with a referenced toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests also shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc.).
- **3.** If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the toxicity test references, then the permittee must resample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger collects the first sample required to complete the retest.
- 4. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

## D. Accelerated Monitoring Requirements

- 1. When acute toxicity is detected in the effluent above the effluent limitation established by this Order or when the chronic toxicity trigger of 1 TUc is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.
- 2. The Discharger shall implement an accelerated monitoring frequency consisting of performing three toxicity tests in a six-week period following the first failed test results.

- **3.** If implementation of the generic Toxicity Reduction Evaluation (TRE) work plan indicates the source of the exceedance of the effluent limitation or toxicity trigger (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the effluent limitation or toxicity trigger is detected in this test, the Discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.
- **4.** If none of the three tests indicated exceedance of the effluent limitation or toxicity trigger, then the Discharger may return to the normal bioassay testing frequency.
- E. Toxicity Identification Evaluations (TIE) and Toxicity Reduction Evaluation (TRE) Process
  - **1.** A Toxicity Identification Evaluation (TIE) shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:
    - **a.** Two of the three accelerated toxicity tests are reported as failed tests meeting any of the conditions specified in section V.C.
    - **b.** The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
    - **c.** If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
  - **2.** The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the U.S. EPA which include the following:
    - **a.** Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, (U.S. EPA, 1992a);
    - **b.** Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (U.S. EPA, 1991a);
    - **c.** Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Sampling Exhibiting Acute and Chronic Toxicity (U.S. EPA, 1993a); and
    - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (U.S. EPA, 1993b).
  - **3.** As part of the TIE investigation, the Discharger shall be required to implement its TRE work plan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE includes the following:
    - **a.** Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment *Plants*, August 1999, EPA/833B-99/002; and
    - b. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program dated March 27, 2001, U.S. EPA Office of Wastewater Management, Office of Regulatory Enforcement.

# VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

# VII. RECYCLING MONITORING REQUIREMENTS – MONITORING LOCATION RCL-001

The Discharger shall comply with applicable State and local monitoring requirements regarding the production and use of reclaimed wastewater, including requirements established by the DDW at title 22, sections 60301 - 60357 of the CCR, Water Recycling Criteria.

Reclaimed water shall be monitored for turbidity, total coliform bacteria, and total residual chlorine at the appropriate frequency to demonstrate compliance with section IV.C of the Order.

Dischargers shall submit an annual report to the State Water Board by April 30 of each calendar year. The data shall be reported for the months of January through December. The Discharger must submit this annual report containing monthly data in electronic format via the State Water Board's Internet GeoTracker system at <a href="http://geotracker.waterboards.ca.gov/">http://geotracker.waterboards.ca.gov/</a>. Required data shall be submitted to the GeoTracker database under a site-specific global identification number. Any data will be made publicly accessible as machine readable datasets, similar to California Integrated Water Quality System (CIWQS) data uploads.

The annual reports shall include:

- 1. **Influent.** Monthly volume of wastewater collected and treated by the wastewater treatment plant.
- 2. Production. Monthly volume of wastewater treated, specifying level of treatment.
- 3. **Discharge**. Monthly volume of treated wastewater discharged to each of the following, specifying level of treatment:
  - a. Inland surface waters, specifying volume required to maintain minimum instream flow.
  - b. Enclosed bays, estuaries and coastal lagoons, and ocean waters.
  - c. Natural systems, such as wetlands, wildlife habitats, and duck clubs, where augmentation or restoration has occurred, and that are not part of a wastewater treatment plant or water recycling treatment plant.
  - d. Underground injection wells, such as those classified by U.S. EPA's Underground Injection Control Program, excluding groundwater recharge via subsurface application intended to reduce seawater intrusion into a coastal aquifer with a seawater interface.
  - e. Land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture or fields with harvested crops.
- 4. **Reuse**. Monthly volume of recycled water distributed.
- 5. **Reuse Categories.** Annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, title 22 in each of the use categories listed below:
  - a. Agricultural irrigation: pasture or crop irrigation.
  - b. Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
  - c. Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.
  - d. Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.

- e. Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
- f. Geothermal energy production: augmentation of geothermal fields.
- g. Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.
- h. Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use.
- i. Seawater intrusion barrier: groundwater recharge via subsurface application intended to reduce seawater intrusion into a coastal aquifer with a seawater interface.
- j. Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in section 116275 of the Health and Safety Code, or into a constructed system conveying water to such a reservoir (Water Code section 13561).
- k. Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system as defined in section 116275 of the Health and Safety Code (Water Code section 13561).
- I. Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

# VIII. RECEIVING WATER MONITORING REQUIREMENTS

# A. Receiving Water Monitoring - Monitoring Locations R-001, R-002, R-003 and R-004

1. The Discharger shall monitor the receiving water at Monitoring Locations R-001 and R-004 as follows: Receiving water at Monitoring Location R-001 shall be monitored only when stream flow is subsurface upstream of the point of discharge (between Chorro Reservoir and the point of discharge).

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Ammonia (as N)	mg/L	Grab	1/Month
Chloride	mg/L	Grab	1/Month
Chlorophyll a	mg/m <sup>3</sup>	Grab	1/Month
Color	color units	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month
Hardness (as CaCO₃)	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
pH <sup>[2]</sup>	standard units	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Temperature <sup>[2]</sup>	۴	Instantaneous	1/Month
TDS	mg/L	Grab	1/Month
Total Nitrogen (as N)	mg/L	Calculated <sup>[3]</sup>	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Month
Un-ionized Ammonia (as N)	mg/L	Calculated <sup>[4]</sup>	1/Month

Table E-5 Receiving Water Monitoring Requirements – R-001 and R-004

- <sup>[1]</sup> Monitoring Location R-001 shall be monitored only when stream flow is subsurface upstream of the point of discharge. When there is no surface flow below the dam, upstream data shall be calculated from an average of the last three samples.
- <sup>[2]</sup> pH and temperature shall be measured simultaneously with total ammonia. Results shall be used to calculate un-ionized ammonia concentration.
- <sup>[3]</sup> Total nitrogen shall be equal to the sum of total Kjeldahl nitrogen, nitrite, and nitrate.
- <sup>[4]</sup> Un-ionized ammonia shall be calculated based on the following formula, or as otherwise approved by the Central Coast Water Board:

$$\mathsf{NH}_3 = \frac{1}{1+10^{(p^K - p^H)}}$$

Where:

pK = 0.09018 + 2,729.92/T

T = Temperature in degrees Kelvin

2. The Discharger shall monitor receiving water at Monitoring Locations R-002 and R-003 as follows. Receiving water at Monitoring Location R-002 shall be monitored only when stream flow is subsurface upstream of the point of discharge (between Chorro Reservoir and the point of discharge).

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Plastics	mg and unit <sup>[2]</sup>	Composite Grab <sup>[3]</sup>	1/Week
Ammonia (as N)	mg/L	Grab	1/Month
Un-ionized Ammonia (as N)	mg/L	Calculated <sup>[4]</sup>	1/Month
Chloride	mg/L	Grab	1/Month
Chlorophyll a	mg/m <sup>3</sup>	Grab	1/Month
Color	color units	Grab	1/Month
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month
Hardness	mg/L	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Total Nitrogen (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month
Total Phosphate (as P)	mg/L	Grab	1/Month
pH <sup>[3]</sup>	standard units	Grab	1/Month
Sodium	mg/L	Grab	1/Month
Temperature <sup>[5]</sup>	°F	Instantaneous	1/Month
TDS	mg/L	Grab	1/Month
Turbidity	NTU	Grab	1/Month
Boron	mg/L	Grab	1/Year
Cobalt	mg/L	Grab	1/Year
Iron	mg/L	Grab	1/Year
Lithium	mg/L	Grab	1/Year
Manganese	mg/L	Grab	1/Year
Methylene Blue Activated Substances (MBAS)	mg/L	Grab	1/Year
Molybdenum	mg/L	Grab	1/Year
Phthalate Esters	µg/L	Grab	1/Year
Sulfate	mg/L	Grab	1/Year
Vanadium	mg/L	Grab	1/Year
CTR Pollutants <sup>[6]</sup>	µg/L	Grab	1/Year
Title 22 Pollutants <sup>[7]</sup>	µg/L	Grab	1/Year

#### Table E-6 Receiving Water Monitoring Requirements - R-002 and R-003

<sup>[1]</sup> Monitoring Location R-002 shall be monitored only when surface flow exists between Chorro Reservoir and the point of discharge.

<sup>[2]</sup> Each individual piece of plastic, regardless of size, is to be counted as one unit.

<sup>[3]</sup> Hold 500-micron sieve, minimum diameter of 21 cm (8.25 inch), in center of stream flow of active channel of Chorro Creek for 5 minutes. Collect any plastic pieces accumulated on sieve and store for analysis. Repeat collection process a minimum of three times. Dry all collected plastic pieces, weigh, and count. Report plastics by total accumulated weight and total number of plastic pieces. The same gage and diameter sieve must be used across all effluent sampling events for the duration of plastics monitoring at the Facility.

<sup>[4]</sup> Un-ionized ammonia shall be calculated based on the following formula, or as otherwise approved by the Central Coast Water Board:

$$\mathsf{NH}_3 = \frac{1}{1+10^{(pK-pH)}}$$

Where:

#### T = Temperature in degrees Kelvin

- <sup>[5]</sup> pH and temperature shall be measured simultaneously with total ammonia. Results shall be used to calculate un-ionized ammonia concentration.
- <sup>[6]</sup> The CTR priority pollutants are those listed by the California Toxics Rule at 40 CFR 131.38 (b) (1). These pollutants shall be monitored one time per year. Analyses, compliance determination, and reporting for these pollutants shall adhere to applicable provisions of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). Monitoring of receiving water for the CTR pollutants shall occur simultaneously with effluent monitoring for the CTR pollutants.
- <sup>[7]</sup> The title 22 pollutants are those for which primary MCLs have been established by the DDW and which are listed in sections 64431-A and 64444-A of the CCR, title 22, division 4, chapter 15. Where these pollutants are also identified as CTR Priority Pollutants, monitoring does not need to be duplicated. Monitoring of receiving water for the Title 22 Pollutants shall occur simultaneously with effluent monitoring for Title 22 pollutants.
  - 3. The Discharger shall monitor receiving water at Monitoring Location R-005 as follows.

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Dissolved Oxygen	mg/L	Grab	1/Month
Dissolved Oxygen Saturation	percent	Grab	1/Month
Nitrate (as N)	mg/L	Grab	1/Month
Orthophosphate (as P)	mg/L	Grab	1/Month

Table E-7 Receiving Water Monitoring Requirements- R-005

<sup>[1]</sup> Sampling shall take place once per month between May and September.

- **B.** Groundwater Monitoring Monitoring Locations GW-001 and GW-002
  - 1. The Discharger shall monitor groundwater at Monitoring Locations GW-001 and GW-002 as follows. After depth to groundwater has been measured, wells shall be purged before samples are collected for analysis.

Parameter	Units	Sample Type	Minimum Sampling Frequency <sup>[1]</sup>
Depth to Groundwater	Feet	Grab	1/Quarter
Nitrate Nitrogen (as N)	mg/L	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Specific Conductance	µhoms/cm	Grab	1/Quarter
Sodium	mg/L	Grab	1/Quarter
Chloride	mg/L	Grab	1/Quarter
Sulfate	mg/L	Grab	1/Quarter
Boron	mg/L	Grab	1/Quarter
Chemical Oxygen Demand	mg/L	Grab	1/Quarter

## **Table E.8 Groundwater Monitoring Requirements**

## IX. OTHER MONITORING REQUIREMENTS

## A. Biosolids Monitoring, Reporting, and Notification – BIO-001

1. The Discharger shall collect a representative sample of residual solids (biosolids) from the last point in the handling process and perform the following analyses:

Parameter	Units	Sample Type	Minimum Sampling Frequency
Quantity Removed	tons or yds <sup>3</sup>	Measured	During Removal
Location of Reuse/Disposal	General Public or Specific Site	Grab	1/Year
Moisture Content	Percent	Grab	1/Year
Ammonia (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Antimony	mg/kg <sup>[1]</sup>	Grab	1/Year
Arsenic	mg/kg <sup>[1]</sup>	Grab	1/Year
Barium	mg/kg <sup>[1]</sup>	Grab	1/Year
Beryllium	mg/kg <sup>[1]</sup>	Grab	1/Year
Boron	mg/kg <sup>[1]</sup>	Grab	1/Year
Cadmium	mg/kg <sup>[1]</sup>	Grab	1/Year
Chromium (IV)	mg/kg <sup>[1]</sup>	Grab	1/Year
Cobalt	mg/kg <sup>[1]</sup>	Grab	1/Year
Copper	mg/kg <sup>[1]</sup>	Grab	1/Year
Fluoride	mg/kg <sup>[1]</sup>	Grab	1/Year
Lead	mg/kg <sup>[1]</sup>	Grab	1/Year
Mercury	mg/kg <sup>[1]</sup>	Grab	1/Year
Nickel	mg/kg <sup>[1]</sup>	Grab	1/Year
Nitrate (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Oil and Grease	mg/kg <sup>[1]</sup>	Grab	1/Year
Organic Lead	mg/kg <sup>[1]</sup>	Grab	1/Year
PCBs	mg/kg <sup>[1]</sup>	Grab	1/Year
Pesticides	mg/kg <sup>[1]</sup>	Grab	1/Year
рН	s.u.	Grab	1/Year
Selenium	mg/kg <sup>[1]</sup>	Grab	1/Year
Silver	mg/kg <sup>[1]</sup>	Grab	1/Year
Thallium	mg/kg <sup>[1]</sup>	Grab	1/Year
Tin	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Chromium	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Nitrogen (as N)	mg/kg <sup>[1]</sup>	Grab	1/Year
Total Phosphorus (as P)	mg/kg <sup>[1]</sup>	Grab	1/Year
Trichloroethylene	mg/kg <sup>[1]</sup>	Grab	1/Year
Vanadium	mg/kg <sup>[1]</sup>	Grab	1/Year
Vinyl Chloride	mg/kg <sup>[1]</sup>	Grab	1/Year
Zinc	mg/kg <sup>[1]</sup>	Grab	1/Year

#### Table E-9. Biosolids Monitoring Requirements

<sup>[1]</sup> Results shall be reported on a dry weight basis.

The following information shall be submitted with the annual biosolids report. Adequate detail shall be included to characterize biosolids in accordance with 40 CFR 503.

- **1.** Annual biosolids production in dry tons.
- 2. Percent solids content of biosolids which leave the site.
- **3.** A schematic drawing showing handling facilities, including temporary and final storage areas. Include a narrative description of solids treatment and performance.

- **4.** A description of disposal methods, including the following information as applicable related to the disposal methods used at the Facility.
  - **a.** For landfill disposal include tons placed in the landfill; the Regional Water Board WDR numbers that regulate the landfills used; the present classification of the landfill; and the names and locations of the landfills which receive biosolids.
  - **b.** For land application include tons applied to the land; the location of the land applications sites; the Regional Water Board's WDR numbers that regulate the land application sites; the application rates in lbs/acre/year (specify the weight basis, e.g., dry weight or percent solids); and the subsequent uses of the land.

## B. Pretreatment Monitoring – Not Applicable

## X. REPORTING REQUIREMENTS

## A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

#### B. Self-Monitoring Reports (SMRs)

- The Discharger shall electronically submit SMRs using the State Water Board's CIWQS Program website <<u>http://www.waterboards.ca.gov/water\_issues/programs/ciwqs/</u>>. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned service interruption for electronic submittal.
- 2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit SMRs including the results of all required monitoring using U.S. EPA-approved test methods or other test methods specified in this Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
- **3.** Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
NPDES Monitoring Report - Monthly	MRP Sections III (Influent), IV (Effluent), VII (Recycled Water) and VIII.A (Receiving Water)	Monthly	First day of second calendar month following period of sampling (first report due October 1, 2020)
NPDES Monitoring Report - Quarterly	MRP Sections IV (Effluent) and VIII.B (Groundwater)	Quarterly	May 1st August 1st November 1st February 1st
NPDES Monitoring Report - Annual	MRP Sections IV (Effluent) and IX.A (Biosolids)	Annually	January 30 <sup>th</sup> following calendar year of sampling

## Table E-10. Reporting Schedule

SMR Name	Permit Section for Monitoring and Sampling Data Included in Report	SMR Submittal Frequencies	SMR Due Date
Facility Summary Report	Attachment D, Standard Provision, VIII.D.8	Annually	January 30th following calendar year of sampling
Recycled Water Summary Report	MRP Section VII (Recycled Water)	Annually	April 30 <sup>th</sup> following calendar year Note: This report is submitted using the GeoTracker system, not CIWQS.
Climate Change Response Plan	Section VI C.6.c	Once per permit	February 1, 2025
<b>ROWD</b> Application	Permit renewal application	Once per permit	February 1, 2025

- **4. Reporting Protocols.** The Discharger shall report with each sample result the applicable RL and the current MDL, as determined by the procedure in 40 CFR part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
  - **a.** Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
  - **b.** Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "ND.
- **d.** Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 5. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and in Attachment A. For purposes of reporting and administrative enforcement by the Central Coast Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
- 6. Multiple Sample Data. When determining compliance with an average monthly effluent limitation (AMEL), average weekly effluent limitation (AWEL), or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the

Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.
- 7. The Discharger shall submit SMRs in accordance with the following requirements:
  - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
  - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the waste discharge requirements; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

## C. Discharge Monitoring Reports (DMRs)

DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or any upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the DMR website at: <<u>http://www.waterboards.ca.gov/water\_issues/programs/discharge\_monitoring</u>>.

## D. Other Reports

The Discharger shall report the results of any special monitoring, TREs, or other data or information that results from the Special Provisions, section VI.C, of the Order. The Discharger shall submit such report with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

In addition, the Discharger shall comply with the reporting requirements below.

## 1. Sewage Spill Reporting and Notifications

a. Sanitary sewer overflows associated with the Discharger's collection system are subject to the online reporting and notification requirements set forth in the Statewide General Waste

Discharge Requirements for Sanitary Sewer Systems Order No. 2006-0003-DWQ. The Discharger has enrolled under the statewide waste discharge requirements for sanitary sewer systems. Therefore, all prohibitions, provisions, and monitoring and reporting requirements of that order apply to the Discharger. For any unauthorized discharges of sewage to a drainage channel or surface water, the Discharger must notify the State Office of Emergency Services, the local health officer or director of environmental health with jurisdiction over affected water bodies, and the Central Coast Water Board, within two hours after becoming aware of the discharge. Additionally, within 24 hours the Discharger shall submit to the Central Coast Water Board certification that the appropriate agencies (i.e., Office of Emergency Services and local Environmental Health Department) have been notified of the sewage discharge to surface water bodies.

b. In accordance with the requirements of Health and Safety Code Section 5411.5, the Discharger shall provide notification to the local health officer or the director of environmental health with jurisdiction over the affected water body of any spills that cause, or probably will cause, a discharge to any waters of the state.

In accordance with the requirements of Water Code section 13271, the Discharger shall provide notification to the State Office of Emergency Services of reportable amounts of hazardous substance spills or sewage spills that cause, or probably will cause, a discharge to any waters of the state. The CCR, title 23, section 2250, defines a reportable amount of a sewage spill as being 1,000 gallons. The phone number for reporting these releases to the **State Office of Emergency Services is (800) 852-7550.** 

The Discharger shall notify the Central Coast Water Board of any spill from its wastewater treatment plant that causes, or probably will cause, a discharge to a water of the state as soon as possible, but not later than **two hours** after becoming aware of the release. This notification does not need to be made if the Discharger has notified the State Office of Emergency Services first. The phone number for reporting these sewage spills to the Central Coast Water Board is **(805) 549-3147**. At a minimum, the following information shall be provided:

- i. The location, date, and time of the spill.
- ii. The water body that received or will receive the spill.
- iii. An estimate of the amount of sewage or other waste spilled and the amount that reached a surface water at the time of notification.
- iv. If ongoing, the estimated flow rate of the spill at the time of the notification.
- v. The name of the organization, phone number, and email address of the reporting representative.
- c. As soon as possible, but not later than 24 hours after becoming aware of a spill from its wastewater treatment plant to a water of the state, the Discharger shall submit a statement to the Central Coast Water Board by email at <u>centralcoast@waterboards.ca.gov</u>. If the spill is 1,000 gallons or more, this statement shall certify that the State Office of Emergency Services has been notified of the spill in accordance with California Water Code Section 13271. The statement shall also certify that the local health officer or director of environmental health with jurisdiction over the

affected water bodies has been notified of the spill in accordance with Health and Safety Code Section 5411.5. The statement shall also include at a minimum the following information:

- i. Agency, NPDES No., Order No., and MRP No., if applicable.
- ii. The location, date, and time of the spill.
- iii. The water body that received the spill.
- iv. A description of the level of treatment of the sewage spill or other waste spilled.
- v. An initial estimate of the amount of sewage spilled or other waste spilled and the amount that reached a surface water.
- vi. The State Office of Emergency Services control number and the date and time that notification of the incident was provided to the State Office of Emergency Services.
- vii. The name of the local health officer or director of environmental health representative notified (if contacted directly); the date and time of notification; and the method of notification (e.g., phone, fax, email).

#### 2. Total Chlorine Residual Release Notification

a. The Discharger shall notify the following agencies **within two hours** if an individual total chlorine residual release to surface water is detected at 0.1 mg/L for more than 30 minutes and/or individual total chlorine residual exceeds 2.0 mg/L, which violate the effluent limitations as defined in section IV.A.1 of this Order:

Central Coast Water Board	805-542-4638
Office of Emergency Services	800-852-7550
California Department of Fish and Wildlife Dispatch <sup>[1]</sup>	831-649-2801
San Luis Obispo County Environmental Health Agency	805-781-5544

<sup>[1]</sup> Prompt dispatch to notify marine protected area warden, enforcement warden, and biologist.

b. Within 24 hours of the release, the Discharger shall certify to the Central Coast Water Board that notifications have been made to appropriate agencies (above). Certification of such notifications shall be conducted through email notifications or by facsimile at 805-543-0397.

#### 3. Reporting of Non-Compliance

The Discharger shall comply with section V.E. of Standard Provisions (Attachment D), following procedures described in a February 17, 1981, tri-agency memo from the Department of Health Services and any amendments thereto, and shall notify the following parties of non-compliance as specified in the February 17, 1981 memo:

Department of Public Health	510-412-4633
Office of Emergency Services	800-852-7550
Department of Fish and Wildlife Dispatch	831-649-2819

# CALIFORNIA DEPARTMENT OF CORRECTIONS AND REHABILITATION CALIFORNIA MEN'S COLONY WASTEWATER TREATMENT PLANT

County Board of Supervisors	805-781-5450
County Ag Commission	805-781-5910
Tomales Bay Shellfish Farms Inc Drew Aldeen	415-250-9905
Morro Bay Oyster Company Neal Maloney	805-234-7102
Grassy Bar Oyster Company George Trevelyan	805-471-9683
Morro Bay National Estuary Program	805-772-3834
Y. Hayashi & Sons	805-489-2595

## 4. Ultraviolet (UV) System Monthly Maintenance Logs

The Discharger shall submit ultraviolet (UV) system maintenance logs to ensure that the UV system operates in compliance with section IV.C of this Order. At a minimum, the UV system maintenance logs must include a detailed description of all maintenance activities carried out during the calendar month including the following:

- a. Dates UV system maintenance performed and name of operator conducting the maintenance.
- b. UV lamp age and replacement tracking sheets.
- c. Verification/calibration logs for all UV instrumentation (e.g., flow analyzers, UV intensity, UV transmittance).
- d. Description of UV system conditions and performance at the time of maintenance, and a description of any maintenance activities that were conducted.

The UV system monthly maintenance log shall be in tabular format and submitted on a monthly basis as a Portable Document Format (PDF) attachment and uploaded to CIWQS with the monthly SMRs.